AMENDMENTS TO THE DRAWINGS

The attached replacement sheet of drawings includes changes to FIG. 1. The replacement replaces the original sheet including FIG. 1. The replacement sheet includes changes to illustrate vias 32 defined by interposer 30.

REMARKS

Claims 1 through 24 are in the application, with Claims 1, 2, 10, 11, 16, 18, 19 and 23 having been amended. Claims 1, 11 and 18 are the independent claims herein. No new matter has been added. Reconsideration and further examination are respectfully requested.

Applicants gratefully acknowledge the indication of allowable subject matter with respect to Claims 6, 8, 9, 14, 15, 21 and 22. Applicants reserve the right to submit an independent claim based one or more of these claims at a later time.

The drawings were objected to under 37 CFR 1.83(a) for allegedly failing to show a plurality of vias, a double data rate memory, and a motherboard as claimed. FIG. 1 has been replaced by the attached replacement sheet, which clearly shows vias 32. Support for the drawing change can be found at least at page 4, lines 10 and 11, and page 6, lines 2 and 3 of the originally-filed specification. The drawing change is not believed to add new matter.

Applicants submit that examples of the claimed double data rate memory and motherboard are clearly shown as elements 110 and 120, respectively, in FIG. 12 of the original specification. Page 7, line 23 to page 8, line 6 provide a corresponding description of FIG. 12. In view of the foregoing, withdrawal of the objection to the drawings is respectfully requested.

Turning to the claim rejections, Claims 1-5, 7, 10-13, 16 and 17 were rejected under 35 U.S.C. §102 as allegedly anticipated by U.S. Patent No. 5,177,594 to Chance et al. (Chance); and Claims 18-20 and 23 were rejected as being unpatentable under §103 over Chance. Reconsideration and withdrawal of the rejections are respectfully requested.

Amended independent Claim 1 concerns an apparatus including a coreless substrate, a layer of material attached directly to an upper side of the substrate, the layer of material having a lower elastic modulus than the substrate, an interposer coupled to the layer of material, and a capacitive layer attached to an upper side of the interposer. Some embodiments of the foregoing apparatus may provide an electronic device attached thereto with resonance damping and protection against mechanical stress.

The art of record is not seen to disclose or to suggest the foregoing features of amended independent Claim 1. More specifically, the art of record is not seen to disclose or to suggest at least a layer of material attached directly to an upper side of a substrate and having a lower

elastic modulus than the substrate, and a capacitive layer attached to an upper side of an interposer coupled to the layer of material.

Chance, in contrast, describes a system including substrate 54 and interposer module 50. A lower portion of interposer module 50 includes wiring layers 60, and solder balls 56 are disposed between wiring layers 60 and substrate 54 to provide conductivity therebetween. Interposer module 50 also includes internal voltage distribution planes 58 separated by capacitance layers. Accordingly, the capacitance layers are internal to module 50 as well.

Chance therefore fails to disclose or to suggest a layer of material attached directly to an upper side of a substrate and having a lower elastic modulus than the substrate. Rather, since solder balls 56 are disposed between wiring layers 60 and substrate 54, wiring layers 60 are not attached directly to any side of substrate 54. Chance also fails to disclose or to suggest a capacitive layer attached to an upper side of an interposer coupled to the layer of material. Instead, the described capacitance layers are *inside* interposer module 50. Chance therefore fails to provide the mechanical protection and resonance damping exhibited by some embodiments of Claim 1.

Amended Claim 1 is therefore believed to be in condition for allowance. Amended independent Claims 11 and 18 relate to a method and a system, respectively, in which a layer of material having a lower elastic modulus than a substrate is attached directly to an upper side of the substrate, and a capacitive layer is attached to an upper side of an interposer coupled to the layer of material. Amended Claims 11 and 18 are therefore also believed to be allowable for at least the foregoing reasons.

CONCLUSION

The outstanding Office Action presents a number of characterizations regarding each of the applied references, some of which are not directly addressed herein because they are not related to the rejections of the independent claims. Applicants do not necessarily agree with the characterizations and reserve the right to further discuss those characterizations.

For at least the reasons given above, it is submitted that the entire application is in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience. Alternatively, if there remains any question regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact the undersigned via telephone at (203) 972-0049.

Respectfully submitted,

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Date

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Attachment: Replacement Sheet of FIG. 1